

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Patent Application No. 09/650,629

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A vehicle key system for verifying an identity of fingerprint information regarding a fingerprint of a user and for controlling pieces of equipment in a vehicle according to a verification result regarding the identity of the fingerprint information, said system comprising:

a fingerprint information capturing means for capturing fingerprint information from the fingerprint of the user;

a fingerprint information storage means for storing at least one piece of fingerprint information regarding an authorized user;

a manipulation detection means for detecting manipulations of at least one operation unit for controlling the pieces of equipment in the vehicle and at least one pedal, wherein said operation unit comprises at least one of a wiper switch, a turn signal switch, a shift lever, and a navigation unit for providing navigation services;

– a fingerprint verification means for verifying an identity of the fingerprint information captured by said fingerprint information capturing means in a first processing mode by comparing the fingerprint information captured by said fingerprint information capturing means with the fingerprint information of the authorized user stored in said fingerprint information

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storage means, wherein the vehicle key system is configured to operate in the first processing mode and at least a second processing mode for administering storage of information in the fingerprint information storage means; and

a processing mode switching means for switching between the first and second processing modes according to detection of a predetermined manipulation of the at least one operation unit or the at least one pedal by said manipulation detection means.

2. (Previously Presented) The vehicle key system according to Claim 1, wherein the first processing mode enables the user to use the vehicle after said fingerprint verification means establishes the identity of the fingerprint information of the user, and the second processing mode registers the fingerprint information of the user to said fingerprint information storage means, and wherein said processing mode switching means switches between the first and second processing modes according to the predetermined manipulation detected by said manipulation detection means.

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3. (Previously Presented) The vehicle key system according to Claim 1, wherein the first processing mode enables the user to use the vehicle after said fingerprint verification means establishes the identity of the fingerprint information of the user, and the second processing mode deletes corresponding fingerprint information stored in said fingerprint information storage means, and wherein said processing mode switching means switches between the first and

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second processing modes according to the predetermined manipulation detected by said manipulation detection means.

4. (Previously Presented) The vehicle key system according to Claim 1, wherein the first processing mode enables the user to use the vehicle after said fingerprint verification means establishes the identity of the fingerprint information of the user, and the second processing mode enables the user to use the vehicle without verification of the identity of the fingerprint information of the user, and wherein said processing mode switching means switches between the first and second processing modes according to the predetermined manipulation detected by said manipulation detection means.

5. (Previously Presented) The vehicle key system according to Claim 1, wherein the first processing mode enables the user to use the vehicle after said fingerprint verification means establishes the identity of the fingerprint information of the user, the second processing mode in which said system registers the fingerprint information of the user to said fingerprint information storage means, a third processing mode deletes corresponding fingerprint information stored in said fingerprint information storage means, and a fourth processing mode enables the user to use the vehicle without verification of the identity of the fingerprint information of the user, and wherein said processing mode switching means switches between the first processing mode and either one of the second, third, and fourth processing modes according to the predetermined manipulation detected by said manipulation detection means.

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6. (Currently Amended) The vehicle key system according to Claim 1, ~~wherein said operation unit comprises at least one of a wiper switch, a winker switch, and a shift lever, and~~ said pedal comprises an acceleration pedal, a brake pedal, or a clutch pedal.

7. (Canceled)

8. (Currently Amended) A vehicle key system for verifying an identity of fingerprint information regarding a fingerprint of a user and for controlling pieces of equipment in a vehicle according to a verification result regarding the identity of the fingerprint information, said system comprising:

a fingerprint information capturing means for capturing fingerprint information from the fingerprint of the user;

a fingerprint information storage means for storing at least one piece of fingerprint information regarding an authorized user;

a fingerprint verification means for verifying an identity of the fingerprint information captured by said fingerprint information capturing means in a first processing mode by comparing the fingerprint information captured by said fingerprint information capturing means with the fingerprint information of the authorized user stored in said fingerprint information storage means, wherein the vehicle key system is configured to operate in the first processing

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mode and at least a second processing mode for administering storage of information in the fingerprint information storage means;

a connecting means for connecting said vehicle key system with an external unit and receiving a signal which indicates manipulation of the external unit; and

a processing mode switching means for switching between the first and second processing modes when the vehicle key system detects the signal received by the connections means indicating a predetermined manipulation of the external ~~means~~ unit.

9. (Currently Amended) The vehicle key system according to Claim 8, wherein the first processing mode enables the user to use the vehicle after said fingerprint verification means establishes the identity of the fingerprint information of the user, and the second processing mode registers the fingerprint information of the user to said fingerprint information storage means, and wherein said processing mode switching means switches between the first and second processing modes when the vehicle key system detects the signal received by the connections means indicating the predetermined manipulation of the external ~~means~~ unit.

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10. (Currently Amended) The vehicle key system according to Claim 8, wherein the first processing mode in which said system enables the user to use the vehicle after said fingerprint verification means establishes the identity of the fingerprint information of the user, and the second processing deletes corresponding fingerprint information stored in said fingerprint information storage means, and wherein said processing mode switching means

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switches between the first and second processing modes when the vehicle key system detects the signal received by the connections means indicating the predetermined manipulation of the external means unit.

11. (Currently Amended) The vehicle key system according to Claim 8, wherein the first processing mode in which said system enables the user to use the vehicle after said fingerprint verification means establishes the identity of the fingerprint information of the user, and the second processing mode enables the user to use the vehicle without verification of the identity of the fingerprint information of the user, and wherein said processing mode switching means switches between the first and second processing modes when the vehicle key system detects the signal received by the connections means indicating the predetermined manipulation of the external means unit.

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12. (Currently Amended) The vehicle key system according to Claim 8, wherein the first processing mode enables the user to use the vehicle after said fingerprint verification means establishes the identity of the fingerprint information of the user, the second processing mode registers the fingerprint information of the user to said fingerprint information storage means, a third processing mode deletes corresponding fingerprint information stored in said fingerprint information storage means, and a fourth processing mode enables the user to use the vehicle without verification of the identity of the fingerprint information of the user, and wherein said processing mode switching means switches between the first processing mode and either one of

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the second, third, and fourth processing modes when the vehicle key system detects the signal received by the connections means indicating the predetermined manipulation of the external means unit.
